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### **Abstract**

This article describes how the journal site of the School of Humanities and Education Sciences at the Universidad Nacional de La Plata was implemented and developed, so that our experience may be useful for anyone embarking on a similar undertaking. We first review the experience of the School in terms of scientific journal publication and the tasks performed by the Library to help its visualization. Secondly, we mention the work of the Under-Secretariat of Publication Management and Dissemination (PGEyD; its acronym in Spanish) of the School to make launching the site a reality. Special reference is made to software customization, massive information upload to the system (users and previous issues), and the procedures that enable the semi-automatic inclusion of the site content in the institutional repository and in the Web catalogue. Then, we discuss the work that is being carried out in connection with editors' training and support, and the results obtained after one year of labour: the creation of 10 journals, the migration of the entire works of four titles and the inclusion of 25% of the contributions published in the journals edited by FaHCE. Finally, we point out a series of challenges that the Under-Secretariat has set itself to improve the site and to optimize intra- and inter-institutional workflow.

### **Keywords**

Scientific Journals, OJS, Universities, Argentina, Universidad Nacional de La Plata, School of Humanities and Education Sciences.

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## Résumé

Cet article vise à décrire l'expérience de mise en œuvre et magazines développement Portail de la Faculté des sciences humaines et de l'éducation à l'Université nationale de La Plata pour lui permettre d'être utilisé par tous ceux qui entreprennent des initiatives similaires. Cela se fait en effectuant d'abord une critique de l'histoire de la Faculté concernant la publication de revues scientifiques et des travaux de la bibliothèque pour aider visionnement. En second ordre, définit les tâches effectuées par le Pro-Secrétaire d'Direction de la rédaction et de la diffusion (PGEyD) de la Faculté de finaliser le lancement du portail. Il est fait référence spéciale à la personnalisation du logiciel, la méthodologie utilisée pour chargement en vrac de l'information dans le système (les utilisateurs et les questions rétrospectives) et des procédures pour permettre l'inclusion dans le dépôt institutionnel et web catalogue de tous les contenus du site de manière semi-automatique. Puis il a fait référence au travail qui est fait en ce qui concerne le soutien et la formation des rédacteurs. Sont exposés ensuite les résultats obtenus jusqu'ici dans une année de travail: création de 10 magazines, 4 salles de migration et d'intégration de 25% des contributions publiées dans des revues publiées par la Faculté titres. Pour conclure énonce une série de défis que le Pro-Secrétaire a proposé d'améliorer le site Web et les flux d'optimiser au sein et entre les institutions.

## Mots-clés

Revues scientifiques OJS; Universités; Argentine; Universidad Nacional de La Plata; Faculté des sciences humaines et de l'éducation

## Resumen

Este trabajo tiene como objetivo describir la experiencia de implementación y desarrollo del Portal de revistas de la Facultad de Humanidades y Ciencias de Educación de la Universidad Nacional de La Plata a fin de que pueda ser aprovechada por todos aquellos que emprendan iniciativas de características similares. Para ello, se realiza en primer lugar un repaso por la trayectoria de la Facultad respecto a la edición de revistas científicas y la labor bibliotecaria para contribuir a su visualización. En segundo orden, se exponen las tareas llevadas adelante por la Prosecretaría de Gestión Editorial y Difusión (PGEyD) de la Facultad para concretar la puesta en marcha del portal. Se hace especial referencia a la personalización del software, a la metodología utilizada para la carga masiva de información en el sistema (usuarios y números retrospectivos) y a los procedimientos que permiten la inclusión en repositorio institucional y en el catálogo web de todos los contenidos del portal de manera semi-automática. Luego, se hace alusión al trabajo que se está realizando en relación al soporte y a la capacitación de los editores. Se exponen, después, los resultados conseguidos hasta el momento en un año de trabajo: creación de 10 revistas, migración de 4 títulos completos e inclusión del 25% de las contribuciones publicadas en las revistas editadas por la FaHCE. A modo de cierre se enuncian una serie de desafíos que la Prosecretaría se ha propuesto para mejorar el Portal y optimizar los flujos de trabajo intra e interinstitucionales.

## Palabras clave

Revistas científicas; OJS; Universidades; Argentina; Universidad Nacional de La Plata. Facultad de Humanidades y Ciencias de la Educación

## Introduction

Over the past few decades the Open Access (OA) movement has been gaining ground in the scientific world with the intent to publish and disseminate scientific knowledge (Muñoz Tinoco, 2005; Miguel et. al, 2013). Its main aim is to narrow the gap in information access by offering information, without restrictions, through the Internet and thus increasing the production cycle of new knowledge (Gómez & Arias, 2002). This movement has advantages over current prevailing models, as it allows for faster research and publishing times, provides lower publishing and access costs, favours dissemination of knowledge and author visibility, and it contributes to an institution's production preservation.

To actually achieve open access to scientific literature, as it is put forward by this movement, authors should have the chance to publish their work in journals that are available online to all readers for free and in which copyright does not limit access or document use (BOAI, 2001). This so-called gold road to open access is supplemented by the green road, which consists in the researchers self-archiving or saving a copy of their work in institutional or thematic repositories (BOAI, 2001). Suber (2012) states that these two roads are complementary and synergistic, because the green road is better at registration, among other things, since the process is fast as well as preservative, whereas the gold road allows for certification through peer reviews.

Research and education institutions are working within this framework to create institutional repositories (IRs) to disseminate and preserve their professors and researchers' intellectual output. The journals are edited by the very institutions that stored as well, which – according to Fushimi (2010) – is beneficial in terms of content dissemination and global visibility since, by complying with the OAI-PMH protocol, repositories may be included in other sites and by search engines, and they also contribute to increased visibility within the publishing organization as well as to long-term digital preservation.

To gain even more visibility and impact, the institutions that publish scientific journals have also included and indexed them in various free and commercial information services. Alperin, Fischman, and Willinsky (2011) believe that, in Latin America, including journals in such sites as SciELO and RedALyC, which has contributed to a move away from paper to the digital medium and that this change of media, in turn, has launched the growth in the number of open access journals in the region.<sup>2</sup> Many institutions, such as the Universidad Nacional Autónoma de México or the Consejo Superior de Investigaciones Científicas (Spain), both widely experienced in publishing and having numerous open titles, have decided to generate portals to face the new challenges. In general, these sites are supported by some journal management software, such as HyperJournal, DPubs, GNU Eprint, or Open Journal Systems (OJS), which turns out to be advantageous for several reasons: they facilitate and optimize the length of time of the different stages of the editing process as well as the ability to comply with publication standards, they enable author-editor-reviewer communication, they allow for several publications to be managed through the same system, they widen published content visibility by offering information to be picked up by other systems, they improve reader-journal relations through added-value services, and they allow for persistent ID generation (Jiménez-Hidalgo; Giménez-Toledo & Salvador-Bruna, 2008).

In OJS specific cases, the metadata of journals hosted by their system can be exported to several external services, which – as Owen & Stranack point out (2012) – contributes to the visibility and recovery of the information within the papers published. This software, as the authors remark, is interoperable with other systems: it provides commercial search engines OAI-PMH compatible services, and it has a number of plugins that permit data import and export to various systems (CrossRef, DSpace, Pub-Med, DOAJ).

Since 2005, the School of Humanities and Education Sciences (FaHCE, by its acronym in Spanish) of the Universidad Nacional de La Plata (UNLP), has been working, with great institutional support and within this international context, to make a contribution to free access to information, with the idea that culture and knowledge belong to everyone.

In 2007, we launched *Memoria Académica* [Academic Memory] ([www.memoria.fahce.unlp.edu.ar](http://www.memoria.fahce.unlp.edu.ar)), our institutional repository (IR), and in 2012, the FaHCE Journal site ([www.revistas.fahce.unlp.edu.ar](http://www.revistas.fahce.unlp.edu.ar)) was inaugurated. This article aims to describe the experience of implementing and developing the latter with OJS software, in the hope that this will be of use for whoever ventures into similar undertakings. First, we review the experience of the School in scientific journal editing and the task of library to help with visibility. Second, we recount the activities carried out by the Under-Secretariat of Publication Management and Dissemination (PGEyD in Spanish) at the FaHCE to set the site in motion. Special mention is made of software customization in connection with the needs of the editors and the local academic community, the methodology used for massive information uploads to the system (users and previous issues), and the procedures allowing for all the site content to be semi-automatically included in the repository and in the Web catalogue. Then we discuss the work that is being carried out in terms of editors' training and support. We also present the results obtained so far and those expected by the end of 2013. Finally, we mention a series of challenges that the PGEyD has set itself in order to improve the site and to optimize intra- and inter-institutional workflow.

### Scientific journal publishing and librarian's work at FaHCE

FaHCE is one of the seventeen academic units of the UNLP.<sup>3</sup> Since its very beginning, the School has been known for publishing scientific journals.<sup>4</sup> Nowadays, 21 journals—18 of which are scientific and three of which are communication journals—are published with the School's endorsement, accounting for 50 percent of the journals published by the university as a whole.<sup>5</sup> Moreover, eight of these titles belong to the Núcleo Básico de Revistas Científicas Argentinas<sup>6</sup> (Basic Nucleus of Argentine Scientific Journals, or NBRCA in Spanish).

Librarians' work toward the standardization and visibility of the journals that have been published since the School began in 2005, when library professionals carried out a preliminary assessment of journals with Latindex Catalogue indexes so as to submit them to the NBRCA for incorporation. Based on the results of the assessment, eight titles were suggested to the authorities of the School, all of which were subsequently submitted to the NBRCA. In 2007, when NBRCA announced the titles that had become part of their collection, out of 60 humanities and social sciences journals, six

belonged to the FaHCE: *Mundo agrario*, *Synthesis*, *Sociohistórica*, *Olivar*, *Revista de Filosofía y Teoría Política*, and *Orientación y Sociedad* (currently published by the School of Psychology). Since then, library labour at the FaHCE has included consultation on issues of journal visibility; compliance with publishing quality standards; and inclusion of journals in various specialized and multi-disciplinary repertoires, both international and domestic (Rozemblum & Banzato, 2010). The results of these tasks have consolidated an interinstitutional co-operation model and have positioned librarians as editorial consultants for all the School journals (Rozemblum & Banzato, 2009).

Also in 2005, Profesor Guillermo Obiols Library at the FaHCE launched the institutional repository, *Memoria Académica* (Fushimi, Mallo, & Pichinini, 2005), which they have managed and developed till the present time. Together with the journal editors, the library has worked to obtain authorization to store the journals in *Memoria Académica*.

Editors agreed that all contributions to all of the journals would be included once published, with no embargo period, and that their inclusion would be prioritized before shipment to external bibliographic information systems.

This decision meant some changes in authors' norms,<sup>7</sup> such as the inclusion of information about journal self-archiving in *Memoria Académica* and in all databases that an editor deems appropriate, and clarification of user licenses adopted for paper dissemination in the IR.

Although the incorporation of the journals into the IR, which was launched in 2007 using Greenstone software (Pichinini, 2010), was a great step toward free journal access—since their storage made digital versions of printed journals available—some weaknesses were found in the journals in terms of compliance with declared publication frequency, as well as in terms of some of the assessment guidelines suggested by international and regional databases. Other weaknesses were the lack of access uniformity of the electronic journals published by the FaHCE—with each located at an independent website—and the growing difficulty of carrying out indexing tasks, due to the number of journals and the range of databases they were part of. Therefore, the need arose for us to acquire an editorial management software which would allow us to develop a journal site to overcome these weaknesses, and with which we might achieve journal access unity, publish digital versions of those journals published only on paper, increase the visibility of contributions, and automatically index different databases, thus optimizing work time. It was then that the OJS software was chosen because of its potential to fulfill all these requirements.

### **Implementation and development of the FaHCE journal site**

The project to implement and develop the FaHCE journals Portal was carried out in different stages:

1. *Stage 1* was carried out during August 2012. It consisted in software design and customization: OJS aesthetic and working aspects were defined according to the needs of the local user community.



2. *Stage 2*, as of the writing of this article, entails the creation of space for each journal in the system, related users upload, inclusion of collections and, finally, their publication. This stage had to be divided in two parts because of the workload it implied and the human resources available at the Under-Secretariat. During the first part of this stage, which took place between September and the beginning of December 2012, when the site was inaugurated, the complete collections of electronic journals as well as the Sociohistórica journal, which was edited on paper, as well as the latest issues of the journals of the institution which are part of the NBRCA, were incorporated. During the second part, which began in July 2013, the remaining issues of the collections entered will be completed and the upload of the rest of the scientific journals published by the School will begin.<sup>8</sup>
3. *Stage 3* sets up the publication in each journal system. It involves training and supporting the School editing groups so that they incorporate the software in the editorial management process.

It should also be pointed out that the PGEyD and the Library are analyzing the possibility to permanently automatize the fluxes between the journal site and the institutional repository of the School.<sup>9</sup> The Under-Secretariat is also working with the University, which has succeeded in including all the scientific journals<sup>10</sup> published in the School within one single portal and will provide access to the different individual sites, such as the FaHCE journal site, through this single portal.

#### SOFTWARE DESIGN AND CUSTOMIZATION

In order to create a design, we brainstormed ideas with the visual communication designer of the team, who developed an identity for the journal portal respecting the identity of the other informational products that the School offers through its webpage. What was considered was a wooden board, representing an oak tree (the University's emblem), with an ancient lock that symbolizes the opening to scientific knowledge. The colour chosen for the wood was red, which alludes to the enthusiasm and strength of the team that started the project, and which in turn contrasts with the lock, striking a balance between the acknowledgement of the hundred-year-old publishing tradition of the School and the adjustment to new digital technologies. A three-column diagramation was devised both for the main page and for each journal: 1) on the left, you can find registered user access, the search engine, navigation options – only in journals – and social network connection, through the whole site; 2) in the centre, the contents are located; and, 3) on the right, you can find links to other institutional sites and scientific information portals in which different titles are included and indexed.

Software customization was necessary in order to fulfill the requirements of the projects and apply the design. Before beginning with the changes at the visual level, a study of the OJS files, the role that these files play in the system,<sup>11</sup> and the localization of the necessary components was carried out. The base template was modified and new templates were created to add functionalities to the main site and to the sites of the different journals, maintaining compatibility with other online search engines and respecting current accessibility and usability guidelines.

In order to make these changes, a new layout was first created, because the features of the OJS original version did not allow the application of the approved design, which required a fixed size. Therefore the layout was prepared so that the whole site had a set width of 1024 pixels. To begin with, a new header was developed for the homepage of the site (Figure 1), which in turn included a link to the institutional portal of the FaHCE at the top, the site logo and the main menu of the site, which in the standard version is located in the central column. This provided the system with the right organization. A new layer with the image that gives the site its identity was added below the header. The *breadcrumb* was also repositioned in the new template: it was applied on a new layer, outside the central column, and a new background image was added to it.

Figure 1: View of the homepage of the FaHCE journal site



As the columns of the homepage were being developed, we realized that the design needed a left column and that the system had not originally offered that possibility.<sup>12</sup> As a result, the components of the current design had to be developed as TPL (Smarty) templates in order for them to be applied to the Homepage. This required a script programming that could determine whether a user was surfing the site “Home” or the journals, and which eliminated the templates developed for the homepage when the user was surfing the journals. This prevented duplication since the homepage components were placed directly on the source code.

The footer of the site, which appears on the whole site, was also altered and used as a Smarty template. Due to the different stages planned for the development of this Project and so as not to create false expectations in the readers, the central column of the main page was divided in two sections: complete collection journals (Revistas completas) and journals whose previous issues were being added (Revistas en proceso). This requirement was fulfilled by making two pages from the homepage with the applied style sheet and modifying the content to create two links to access each section. Another static page was necessary for the item “Equipo” to include the names and contact information of all the people working on the project.

In the case of the template for the journals, the header was altered to be consistent with the style of the site homepage. As shown by Figure 2, the institutional header with a link to the institutional portal of the FaHCE is kept at the top and the size of the identity layer is reduced to allow for the heading of each journal below it. In order to design these headings, the journal templates were modified, through PHP and Smarty programming to show the journal logo, the title, and the description already stored within the system.

**Figure 2: Example of the view of a journal in the FaHCE journal site: Mundo Agrario**



The central column of the content section of the main view of each journal was also modified to achieve the required design: the order of information predetermined in OJS installation was altered and the month and year of publication as well as the volume and number were added to complete the necessary information to facilitate issue identification.

It should also be pointed out that, to view the published contributions on screen – both in the HTML and PDF versions and the content table of each issue – the changes made to the journal templates had to be replicated because OJS handles those details with different templates.

Finally, index templates were added to the links that are generally located on the right column. This required both the plugin of static text, which was styled through HTML and CSS code, and the incorporation of images.

## CONTENT INCORPORATION

Due to the amount of information to be added to the system, the processing of information was fully automated. In this section, we deal with the methodology used to massively upload users and to include the previous issues of the titles to be incorporated. We made use of files stored in the institutional repository, Memoria



Académica, and of structured bibliographical information from the analytic database of FaHCE publications, supported by ISIS software, which has also been managed by the Library since the 1990s<sup>13</sup>. We then share the methodology used to set up the site and to complete a reverse process, which allows feeding from the journal's site to the analytics catalogue of the Library and to the institutional repository.

### *Users import*

The users for each journal were uploaded en masse by means of an XML file import with the OJS standard import and export plugin. To accomplish this, first the obligatory fields for the system (name, surname, country, institution affiliation, email address, user name, initials, password and role) were detected. The information provided by the editors was then structured in a text file. The information was written as plain text and characters were added as field separators in order to be able to work with the files from *Libreoffice Calc*.<sup>14</sup> The only information we had was name, surname, country and institution affiliation, so the rest of the information had to be generated automatically through spreadsheets functions. Each email address was filled in with a temporary value made of the user's name and a fake provider. The user's name was generated from the name and surname initials, a random password was temporarily created, and a role was assigned to each user. Next the information was automatically labelled with XML tags to eventually export them as XML files.

As regards the autocompletion of the necessary fields, in the "country" field, for which the system requires a two-letter code (ISO 3166-1 alfa-2), the available information had to be standardized since we already had the name of the countries. Then we resorted to a *sed*<sup>15</sup> console command and an equivalence chart, which facilitated the necessary replacements on to the XML file. The institution affiliation was solved in the same way, but in the opposite direction: we had the acronyms for the universities, which had to be written out in full.

In order to finish processing the XML files, the opening and closure tags were added indicating UTF-8 character-encoding, which were then incorporated into the system using the specific plugin.

### *Massive file editing*<sup>16</sup>

The PDF files of the published articles to be included in the site were automatically manipulated in batches in order to add metadata based on the information exported from the analytics database and to complete each article's ID, including bibliographical information and user license specifications.

At first, *PDFTK*<sup>17</sup> tool use was considered for metadata incorporation, but the task was simpler with *EXIFtool*,<sup>18</sup> since this tool allows you to add all the necessary fields in one line. A series of aspects had to be taken into consideration regarding the relocation of information from the database to the files: character codification in the TXT files exported from the bibliographical database had to be changed from ISO-8859-1 to UTF-8, *dos* newlines were replaced by *UNIX*<sup>19</sup> ones, and the lists exported from ISIS which were not ordered in the same way as the journal,<sup>20</sup> had to be rearranged with a function that could go through all the files. Metadata incorporation into the files was performed automatically using a script in *BASH*.<sup>21</sup>

The incorporation of bibliographical information and license specification to the files was performed in *PDFTK* which, among other applications, offers the possibility to stamp a text or image template in PDF format on another PDF file. Therefore, a template was edited for each issue and this was then massively applied to all appropriate files, also through a script in *BASH*.

### *Online catalog data import for previous issues upload*

While working on the development of the site, a strategy was also devised to export metadata from the analytics database of the Library, in *ISIS*, which may allow us to import previous issues of the journals to the new information system. A precedent to this was the export experience from this very database to the metadata records in the institutional repository on Greenstone, which is why a similar procedure was used again.

First, we analyzed the XML structure of the DTD (*document type definition*) typical of the OJS system, and we mapped it with an analytics database definition in *ISIS*. A print file (PFT) was then configured in *ISIS* language to get the required XML tag structure. To export the information of each journal issue in a TXT file with XML tags, a specific command-line was used that was executed through *CISIS MX*. In order for it to be read by the software, we had to codify it with DTD information and changed it into XML format.

Before importing the information to the appropriate issue, previously created with the “*Articles and issues XML plugin*” featured in OJS, quality control of the exported information was performed. Files from the server were included and their addresses were identified in the tags in order to speed up the file uploading process. This enabled us to upload PDF and HTML versions. Once the information added to the system had been standardized, the issues were published.

### *Interoperability with the institutional repository*

With the OJS site, it is the authors who log on to the system and enter their papers’ information, and it is the editors and librarians of the PGEyD that revise and standardize the information. This information is then recorded on the IR, enabling us to work on the interoperability of both systems and to weigh the possibility of creating a set of metadata that allow the repository to harvest the articles through the OAI-PMH protocol.

So far, and given that the portal began working at the end of 2012, several journal issues have been published and a reverse flux to the one described above has been designed, which permits the semi-automatic incorporation of information to the IR. This was achieved through the interoperability between the information in the site and in the analytics database feeding the IR. The metadata generated from an OJS issue export were mapped with the metadata defined in the analytics database. Even though we analyzed the various DTD of information offered by the OJS standard set-up, we decided to use the DTD of the system to export the information as it most closely resembled the database structure.

The metadata, describing the ID information of the different published papers, were then restructured at the library, with a procedure that uses *CISIS* utilities to program

scripts *ad hoc*, and the analytics databases were then incorporated semi-automatically and sent to the repository. This procedure also allows for the automatic incorporation of other metadata that are not taken into consideration by the OJS structure, but which are registered in the database, along with the expert catalogers' enrichment.

### **Working with the editors**

From the moment the site was launched, PGEyD has begun training editorial teams so that they can manage their journals with OJS and has been providing them with constant support to incorporate this new tool.

In December 2012 there was a general training session for editors that consisted of an information talk and a system demonstration. At the beginning of 2013, a syllabus for a workshop was planned related to the use of OJS for all editors in general.<sup>22</sup> The training session was thought, at first, to be for all editors together; however, it was later decided that it would be more convenient for it to be delivered to individual teams of editors, adapting the content to the needs of each group.

As part of the support to both electronic and paper journal edition and publishing, the creation of a space on the virtual campus of the School was envisioned on Moodle. The Under-Secretariat is currently working on its content (guidelines, instructions, procedures, and documentation facilitating editorial tasks). This is also expected to foster debate among institution editors, create good editorial practices and turn into a new communication channel with the PGEyD.

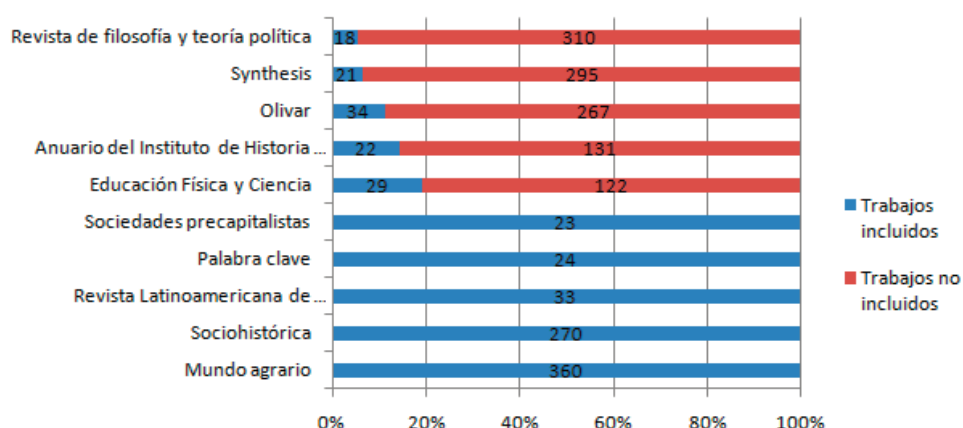
### **Results<sup>23</sup>**

Apart from training the Under-Secretariat staff in software use, the information of each journal was set up and a total of 834 contributions belonging to ten journals were actually added with the methodology explained above: four complete electronic journals published on Plone were migrated, a digitized journal in print was automatically uploaded, and complete texts and metadata from the latest issue of five other journals in the NBRCA were also migrated. These tasks were all completed during the first stage that took place between August and December 2012. PDF and HTML creation for *Mundo Agrario*, *Sociedades Precapitalistas* and *Palabra Clave* as well as file formatting, analytics catalog metadata exporting to OJS and information standardization were taken on by four part-time employees, who added this processing task to their other office tasks. It is estimated that the uploading of each article took less than an hour.

Graph 1 shows the number of published works in each journal that have been included in the FaHCE journal site during the first uploading stage. There are five complete titles, while the rest of the journals have only reached 20% of their collections.

In this stage, we succeeded in incorporating 25 percent of the published contributions of the 18 scientific journals edited in this institution. Since the second uploading stage has been implemented, this percentage has increased every day, with 495 more issues uploaded – 40 percent of the number of published works of all journal editing by FaHCE.

**Graph 1: Number of published works in each journal that have been included in the FaHCE journal site**



### Future challenges

The development of these kinds of portals in the South American region favours open access in two ways: first, they offer journals in open access (“gold road” open access) the opportunity to facilitate management and diffusion, and second, they allow the possibility of self-archiving and the accumulation of institutional initiatives (“green road” open access). As Suber (2012) indicates, the two ways – complementary and synergistic – converge in open access to consolidate a system of conservation and to strengthen the certification process of scientific knowledge. The achievement described in FaHCE is embedded in a regional context that many institutions with similar characteristics have yet to develop; therefore, we consider that it could be replicated, and that others could benefit from the solutions we arrived at.

In less than a year’s work, great progress has been made in uploading the digital versions of a set of journals edited by FaHCE to FaHCE’s own site. One of the most important aims of PGEyD is to be able to offer, in the short term, an electronic version of the 18 scientific journals edited and co-edited by the School, making the most of the advantages that OJS offers, whether in management or in dissemination.

We are also working with the software to ensure that the journals edited by the School fulfill the parameters required by different sites, indexing them in as many databases as possible. We expect to be able to automate these processes with the use of the plugins available for OJS, as is currently being done with DOAJ ([www.doaj.org](http://www.doaj.org)), a directory in which more than 400 articles have been indexed just by exporting a structured XML file with the DTD accepted by DOAJ, and then importing XML, using the import file option of the online system.

While publishing in the Portal facilitates inclusion in systems like SciELO and RedALyC, even this relation is far from automatic; as such, one of the goals of PGEyD is to improve not only internal but interagency fluxes.

We are looking forward to improving the site’s interoperability with the IR so as to completely automate the importation to the IR of all the contributions published in the

journals. In both cases, we will have to assess the use of the existing tools or the use of an application program that would complete the automation.

There is still a long way to go in order to get accurate data to measure the visibility of journals in this Portal. Informally, the editors have noticed an increase in the reception of originals in several magazines, which has led to a change from annual to semiannual editions. Furthermore, considering comparable paper distribution (up to 200 copies), with visits to the website for each magazine, there was an increase in number and geographic dispersion of visitors.

Last but not least, we will continue working with each editorial team to achieve tool uptake. The PGEyD provides the editors with permanent support and boosts confidence for editors' self-management.

## Notes

1. The content of this paper was presented at the *PKP Scholarly Publishing Conference 2013*, which took place on August 19-21, 2013 in the city of Mexico.
2. There are over 1877 Latin American journals currently registered in DOAJ.
3. The UNLP is the second most prestigious university in Argentina. According to the UNLP site (<http://www.unlp.edu.ar/institucional>), 111 undergraduate and 170 graduate and post-graduate courses of study are currently offered. Latest search: 7/21/2013.
4. The School's first journal, "Archivos de pedagogía y ciencias afines" ["Archives of Pedagogy and Related Sciences"], published its first issue in 1906.
5. Out of all the scientific journals identified in the Scientific Journal Support Subsidy Program, UNLP 2012.
6. The NBRCA call is organized by the Centro Argentino de Información Científica y Tecnológica (Argentine Center for Scientific and Technological Information, CAICYT in Spanish) together with the Consejo Nacional de Investigaciones Científicas y Técnicas (National Council for Scientific and Technological Research, CONICET in Spanish). For further information visit [http://www.caicyt.gov.ar/index.php?option=com\\_content&view=article&id=32&Itemid=119](http://www.caicyt.gov.ar/index.php?option=com_content&view=article&id=32&Itemid=119).
7. For example, authors' norm for the journal "Mundo Agrario": <http://mundoagrario.unlp.edu.ar/about/submissions#authorGuidelines>.
8. The subsidy obtained through the Scientific Journal Publication Support Subsidy Program granted by the UNLP will enable this stage. Seven librarians with knowledge of digital object description and processing have been hired with these funds.
9. Let us mention that, in parallel with the developments of the School, the UNLP has both a central repository, SEDICI, which uses DSpace software, and an OJS journal



portal. Both projects aim at supporting the Schools that lack the appropriate support to develop their own repositories and electronic journals and at moving toward the interoperability of the various projects within and beyond the University (De Giusti, et al, 2013).

10. UNLP Scientific journal site: <http://revistas.unlp.edu.ar/cientificas/>
11. These are php and tpl files, since the software has been developed with PHP technology and with the SMARTY Templates engine.
12. The possibility to have a left column does exist in the journals.
13. This database records the analytics of the journals published by FaHCE-UNLP and feeds the Library's online catalog.
14. Office suite spreadsheets developed by Document Foundation (<http://www.libreoffice.org>).
15. SED (stream editor) is a stream editor that transforms text lines from files or from command outputs, by substituting or eliminating pipelines using regular expressions. In order to do this, it uses commands on one code line or from those included in a file.
16. GNU/Linux Mint LMDE (Linux Mint Debian Edition) distribution was used both for massive file edition and for users automatic incorporation, as explained before, not only because it privileges the use of free software tools but also because of the flexibility, power, and interoperability of the said applications.
17. PDFTK (PDF tool kit) is a command-line interface tool used for splitting, merging, and inserting text and images, as well as exporting and adding metadata, among other tasks, on or to PDF files.
18. EXIFTool (Exchangeable image file format tool) is a tool used for reading and writing metadata of various kinds of files. EXIF is a standard that specifies the formats of image files used by digital cameras, which were then used for audio files as well.
19. Newline is a control character indicating a movement to the next line of text; in UNIX based systems only one character is used whereas in DOS/Windows two are used (carriage returns and newlines). This difference causes difficulty in reading files created with other systems.
20. Lists were exported in order, according to database register number (MFN).
21. BASH (bourne again shell) is a typical command processor in most GNU/Linux distributions.

22. Content was structured in four units: the first one was an introduction to OJS, the second one was related to software editorial tasks and processes, the third one covered public roles and highlighted the role of the author and the process of paper delivery, and the fourth and last unit aimed at organizing the tasks and improving work flow with the Under-Secretariat.
23. The results put forward were those available at the time of the writing of this article (October 8, 2013), but we continue working on journal and collection incorporation.

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